

REMARKS

Claims 1-5, 17-28, 40-51, 63-67, 94 and 95 are pending. Claims 1, 22, 45, 94 and 95 are the only pending independent claims. Claims 94 and 95 are hereby cancelled.

Claim Rejections – 35 U.S.C. § 102

Claims 94 and 95 stand rejected under 35 U.S.C. 102(b) as being anticipated by EP 1049226A (hereinafter “EP ‘226”). Without conceding to the rejection and solely for purposes of advancing prosecution of the instant application. Applicants have cancelled claims 94 and 95.

Claim Rejections – 35 U.S.C. § 103

Claims 1-5, 17-19, 22-28, 40-42, 45-51 and 63-65 stand rejected under 35 U.S.C. 103 as being obvious over U.S. Pat. Nos. 6,450,458, 6,523,791, 6,559,378 and 6,634,605 (collectively, the “APA”) in view of EP ‘226. Claims 20, 21, 43, 44, 66 and 67 stand rejected as being obvious over the APA in view of EP ‘226 and further in view of U.S. Pat. No. 6,712,649 to Mano et al. (hereinafter “Mano”).

Applicants respectfully request reconsideration because the APA and EP ‘226 do not render independent claims 1, 22 and 45 *prima facie* obvious. But even if said independent claims are obvious, the rejection of dependent claims 20, 21, 43, 44, 66 and 67 should be withdrawn because Mano is non-analogous prior art outside Applicants’ field of endeavor.

I. Applicants’ Claims Are Not Obvious Over The APA/EP ‘226 Combination

Applicants respectfully submit that the proposed combination of the APA and EP ‘226 fails to meet *all* three of the required criteria for establishing *prima facie* obviousness:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First there must be some suggestion or motivation, either in the references themselves or in the knowledge of generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

MANUAL OF PATENT EXAMINATION AND PROCEDURE (“MPEP”) at § 2143. The Office Action’s proposed modification to the APA with the teachings of EP ‘226 fails for each of the following reasons:

- First, the combined references do not teach or suggest a number of Applicants’ recited claim limitations, including for example, application of force to the barb to cause movement of the barb arms from an unengaged position to an engaged position;
- Second, even if such a teaching were present, there is no reasonable expectation of success in employing the lever of EP ‘226 with the cable duct coupler of the APA. In fact, the proposed combination would require a substantial redesign of the APA device so that the EP ‘226 lever could access the top edge of cable duct; and
- Third, other than impermissible hindsight, there is no sufficient teaching, motivation or suggestion for the proposed combination, particularly given the fact that the barb arms of the APA already engage sections of cable duct after insertion into the coupler (*i.e.*, there is no need for an additional engagement mechanism in the APA);

A. Limitations Not Taught By The Proposed Combination

The proposed combination of the APA with EP ‘226 does not teach or suggest a releasable assembly capable of “applying a force to the barb and, responsive to the application of the force, for moving the barb and one or more barb arms from an unengaged position to an engaged position,” as recited by independent claims 1, 22 and 45.

The lever assembly of EP ‘226 simply cannot move the APA barb and barb arms from an unengaged position to an engaged position because upon insertion of cable duct sections into the APA duct coupler, the terminal edges of the APA barb arms are already positioned to bitingly engage side surfaces of cable duct. U.S. Pat. No. 6,450,458 (“APA ‘458”), at col. 3, ll 60-63, for example, states “the edges of the arms grab onto the duct section and the arms upon slight withdrawal of the duct section bend outwardly, which provides additional retention force onto the duct sections to resist further movement.”¹

¹ This feature is common to the other members of the APA.

This arrangement is shown in detail at Fig. 5 of APA '458. Thus, neither asserted lever assembly of EP '226 (including the assemblies designated by reference characters 30a and 20e) would move the APA barb and barb arms from an unengaged position to an engaged position because the barb arms of the APA are already engaged upon insertion.

In contrast, the terminal edges of the barb arms in typical embodiments of the present invention are positioned in a spaced apart relationship with side surfaces of cable duct after insertion of cable duct sections into the duct coupler. Fig. 2C illustrates this relationship, with the terminal edges of barb arms 240 spaced apart from the side surface of cable duct section 54. It is not until lever 40 of the present invention is rotated downward, as in Fig. 2B, that barb arms 240 are moved from an unengaged position into the engaged position.

Given the foregoing, Applicants respectfully submit that the lever assembly of EP '226 does not cure the deficiency in the APA with respect to Applicant's claimed subject matter. The lever assembly of EP '226 is not capable of moving the barb arms of the APA from "an unengaged position to an engaged position," as recited by independent claims 1, 22 and 45. Accordingly, Applicants request reconsideration of the rejection and allowance of independent claims 1, 22 and 45 as well as all claims dependent therefrom.

B. No reasonable expectation of success

Further, there is no reasonable expectation that the proposed combination of APA as primary reference with EP '226 as secondary reference would succeed in achieving Applicant's claimed invention, as recited by independent claims 1, 22 and 45.

The Office Action, at pages 2-3, asserts that two embodiments of the lever assembly of EP '226 – designated by reference characters 30a and 20e – could be employed with the barb assembly of the APA. A close examination of the structure of the APA barb assembly, however, reveals that both embodiments of the EP '226 levers are incompatible with the structure of the APA barb assembly. Specifically, the APA barb assembly works in conjunction with a cable duct coupler 100, which comprises reinforcing ribs 160 extending outwardly from the coupler.

With respect to the EP '226 lever assembly designated by 30a, the positioning of the reinforcing ribs of the APA coupler would preclude engagement of the lever assembly under the top edge of cable duct. That is, the reinforcing ribs would block the top portion of the EP '226 lever assembly from rotating into the open space under the top edge of the APA cable duct.

Likewise, the EP '226 lever assembly designated by 20e would not work with the device of the APA. Not only is there no point of attachment on the APA coupler or cable duct for the EP '226 lever assembly of 20e, but the reinforcing ribs of the APA coupler would block access of curved portion 31e to the underside of the top edge of the APA cable duct. The Office Action is noticeably silent concerning how to secure EP '226 lever assembly 20e to APA, especially given the positioning of the APA coupler. Further, as shown in Fig 9 of EP '226, a surface of the elongated portion of part 30e must be flush against the side surface of the cable duct for effective engagement. Such an arrangement is simply not possible with the APA coupler and its reinforcing ribs 160 in the way. Finally, the structure of the cable duct shown in the APA would not accommodate the curved portion of the lever assembly of 30e, as the top portion of the APA cable duct includes a lower lip that juts outwardly from the underside of the top edge.

Since the proposed combination would impermissibly require a substantial redesign of either the coupler of the APA or the EP '226 lever assembly, the proposed combination is not proper. MPEP2143.01(VI) (noting that combinations of references cannot require a "substantial reconstruction and redesign of the elements shown").

For these reasons, Applicants respectfully request that the Examiner reconsider his rejection of claims 1, 22 and 45 and pass these claims as well as all claims dependent therefrom to allowance.

C. No Teaching/Motivation/Suggestion

Along these same lines, the Office Action fails to provide a sufficient teaching, motivation or suggestion for combining the APA with EP '226. And there is none.

Since the terminal edges of the barb assembly of the APA engage the side surfaces of the cable duct upon insertion into the duct coupler, there would be no need to employ the lever assembly of EP '226 to lock the barb assembly in place. That is, absent impermissible hindsight, one of ordinary skill in the art would not look to add the lever assembly of EP '226 to the device of the APA because the lever assembly would serve no purpose.

In the absence of some teaching, suggestion or motivation to combine, the proposed combination of the APA and EP '226 is inappropriate. Accordingly, Applicants respectfully request allowance of independent claims 1, 22 and 45 and their dependents.

II. Mano Is Not Analogous Prior Art.

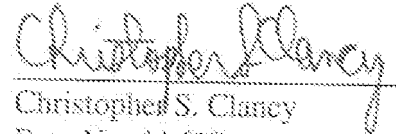
Putting aside the above-described problems with the proposed combination of the APA and EP '226, the Office Action's rejection of dependent claims 20, 21, 43, 44, 66 and 67 also fails because the use of Mano is improper. To rely on a reference under 35 U.S.C. 103, it must be analogous prior art. M.P.E.P. 2141.01(a). There can be no dispute that Mano is outside Applicants' field of endeavor. Mano teaches a plug assembly for insertion into the various jacks of a stereo system. Mano does not mention or even hint at cable duct couplings. Further the function of Mano's lever 39 is to sandwich a lead wire 3 between a plate spring 33 and the plug housing inner wall 51, not to apply force to a barb so that it contacts the end portions of connectable cable ducts. Under these circumstances, Mano is not a proper prior art reference.

Accordingly, Applicants respectfully submit that dependent claims 20, 21, 43, 44, 66 and 67 are allowable even if independent claims 1, 22 and 45 are not.

CONCLUSION

Applicants respectfully submit that pending claims 1-5, 17-28, 40-51 and 63-67 are now in condition for allowance. Favorable action is earnestly solicited.

Respectfully submitted,



Christopher S. Clancy
Reg. No. 44,618
Attorneys for Applicants

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Panduit Corp.
Legal Department - TP12
17301 S. Ridgeland Avenue
Tinley Park, Illinois 60477-3091
(708) 532-1800, Ext. 1302